#### COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

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In the Matter of:

ADJUSTMENT OF RATES OF SHELBY )
RURAL ELECTRIC COOPERATIVE ) CASE NO. 8713
CORPORATION )

# ORDER

On December 21, 1982, Shelby Rural Electric Cooperative Corporation ("Shelby") filed an application with this Commission requesting to increase its annual revenue by \$585,000, or 8.1 percent based on normalized test year revenue. Shelby stated that the proposed rate adjustment was required due to increased operating expenses, higher interest rates, and declining growth in sales, all of which have contributed to reduced margins.

on December 27, 1982, the Consumer Protection Division in the Office of the Attorney General moved to intervene in this proceeding pursuant to KRS 367.150(8), which motion was granted. No other parties appeared to formally intervene herein. The Commission scheduled a public hearing on the matter and directed Shelby to give notice to its consumers of the proposed rates and the hearing scheduled for April 19, 1983.

This Order addresses the Commission's findings on issues disclosed in the hearing and investigation of Shelby's revenue requirements and rate design. Based on the determination herein, Shelby has been granted an increase in revenue of \$520,837 annually, an increase of 7 percent.

# COMMENTARY

Shelby is a consumer-owned rural electric cooperative engaged in the distribution and sale of electric energy to approximately 7,417 member-consumers in the Kentucky counties of Shelby, Henry, Trimble, Carroll, Owen, Oldham, Franklin, Spencer, Anderson and Jefferson. Shelby purchases all of its electric energy from East Kentucky Power Cooperative, Inc. ("East Kentucky").

# TEST PERIOD

Shelby proposed and the Commission has accepted the 12-month period ending June 30, 1982, as the test period for determining the reasonableness of the proposed rates. In utilizing the historical test period, the Commission has given full consideration to appropriate known and measurable changes.

# VALUATION

# Net Investment

Shelby proposed a net investment rate base of \$10,196,689. The Commission concurs with this determination with the following exceptions:

Shelby proposed several adjustments to plant in service and construction work in progress ("CWIP") to reflect changes occurring after the test year. These included transfers from CWIP to plant in service in the amount of \$69,021 and adjustments to increase plant in service by \$117 and CWIP by \$10,967 to include the effects of the portion of pro forma expense adjustments charged to these accounts.

The Commission's objective in establishing the year-end rate base is to determine the value of Shelby's plant devoted to public use at the end of the test year. Shelby did not propose to adjust operating revenues and expenses associated with the addition of new facilities. Therefore, in accordance with past practice, the Commission will not allow the post test period adjustments to plant in service and CWIP.

The Commission has adjusted the accumulated provision for depreciation to reflect the pro forma adjustment to depreciation expense found reasonable herein. Also, the provision for working capital has been adjusted to reflect the pro forma adjustments to operation and maintenance expenses allowed herein for rate-making purposes.

Based on the Commission's adjustments, Shelby's net investment rate base found reasonable for rate-making purposes is as follows:

#### Net Investment

Utility Plant in Service Construction Work in Progress Total Utility Plant	\$ 11,909,551 77,783 \$ 11,987,334			
Add:				
Materials and Supplies Prepayments Working Capital Subtotal	\$ 241,898 30,076 179,614 \$ 451,588			
Deduct:				
Depreciation Reserve Customer Advances for Construction Subtotal	\$ 2,243,632 78,521 \$ 2,322,153			
Net Investment	\$ 10,116,769			

# Capital Structure

The Commission finds from the evidence of record that Shelby's capital structure was \$11,282,504 at June 30, 1982, and consisted of \$3,024,846 in equity and \$8,257,658 in long-term debt. In this determination of the capital structure, the Commission has excluded accumulated generation and transmission capital credits in the amount of \$357,754.

# REVENUES AND EXPENSES

Shelby proposed several adjustments to revenues and expenses to reflect more current and anticipated operating conditions. The Commission finds the proposed adjustments are generally proper and acceptable for rate-making purposes with the following modifications:

# Revenue Normalization

Land Section

Shelby proposed an adjustment of \$1,394,463 to normalize its test year revenue from sales to reflect a full

year's sales at the rates proposed by East Kentucky in Case No. 8648, Adjustment of Rates for Wholesale Electric Power to Member Cooperatives of East Kentucky Power. Shelby has now incurred an increase in its wholesale power costs from East Kentucky, as approved by the Commission in Case No. 8648. In order for Shelby to recover this additional cost, the Commission approved a rate increase, effective April 1, 1983, in Shelby's flow-through case, Case No. 8699. To reflect that increase in this case the Commission has increased operating revenues by \$1,020,798.

# Purchased Power Adjustment

Shelby proposed an adjustment of \$1,337,126 to normalize its purchased power cost for the test year based on the wholesale power rate proposed by East Kentucky in Case No. 8648. To reflect the increase in Shelby's power cost from East Kentucky's wholesale rate increase the Commission has increased the purchased power cost by \$1,001,709.

#### Fuel Clause

Shelby's fuel adjustment clause contains a provision which allows total recovery or refund of fuel adjustment charges or credits. Therefore, the Commission has decreased revenue by \$133,559 and decreased purchased power expense by \$140,793 to exclude the fuel revenue and cost actually incurred during the test year in the determination of revenue requirements.

# Employment Insurance Coverage

Through the National Rural Electric Cooperative Association Shelby provides life, disability and accident Medical insurance is provided insurance for its employees. through a self-insurance program. Shelby proposed adjustment of \$9,229 to reflect an increase in the cost of insurance based on the current premium rates and the The Commission concurs with normalized level of salaries. this adjustment with the exception of the calculation of the Shelby used 43 employees to compute major medical premium. the new premium amount although Shelby's witnesses at the hearing stated that there were now only 39 employees. reduction in staff was a cost-saving measure brought about by not replacing retiring employees. The Commission has, therefore, decreased the adjustment by \$5,904 which results in a pro forma employee insurance expense of \$79,865.

#### Depreciation Expense

Shelby proposed an adjustment of \$13,174 to increase depreciation expense based on the year-end level of plant in service plus the transfer of \$69,021 from CWIP to plant in service. As discussed previously, the Commission has not accepted the transfer from CWIP to plant in service. Therefore, the proposed adjustment to depreciation expense has been reduced by \$2,057 to reflect the annual expense for the test year-end level of plant in service.

#### **Employment Taxes**

Shelby proposed an adjustment of \$4,845 to increase employment taxes. Based on Shelby's revised schedule of salaries and wages the amount of employment taxes should be adjusted to reflect the new salary amounts, the current tax rates for each of the three taxes, and the allowable maximums used in the tax calculations. The Commission has, therefore, increased the proposed adjustment by \$233 which results in a pro forma employment tax of \$52,287.

# Interest Expense

Shelby proposed an adjustment of \$59,636 to increase interest expense to reflect the year-end levels of long-term debt and the advance of an additional \$468,000 scheduled to occur in 1982. The Commission concurs with this adjustment except that in calculating Shelby's interest expense, the Commission has included a change from 9 to 13.5 percent in the interest rate on CFC note 9006 effective May 31, 1983. Therefore, the Commission has increased the pro forma interest expense by \$7,091.

# **Directors Expenses**

The directors of Shelby have adopted a policy of providing compensation for their actual expenses while in industry association meetings. This attendance at includes auch costs meeting fees, componsation A S transportation, lodging, and meals. In addition, Shelby provides an allowance of \$100 per day for each director association meetings. Commission attending the The

is of the opinion that only reasonable costs should be reimbursed and that the \$100 per diem allowance is excessive and unreasonable. Therefore, the Commission finds that Shelby should discontinue its practice of providing this per diem allowance and has reduced directors fees by \$5,900 for rate-making purposes to exclude the amount of this allowance incurred during the test year.

Shelby spent \$387 for Christmas gifts for the directors in the test period. The Commission is of the opinion that this is an unnecessary expense and should not be allowed for rate-making purposes.

The net effect of the aforementioned adjustments is to decrease directors fees and expenses by \$6,289.

## Annual Meeting Expenses

During the test period Shelby incurred \$6,812 in expenses related to the annual meeting. These expenses included \$1,200 paid for an annual meeting sign which Shelby's witness stated was a non-recurring expense. Therefore, the Commission has excluded \$1,200 of annual meeting expenses for rate-making purposes.

# Institutional Advertising

In response to a request for information regarding test year advertising expenses, Shelby provided a schedule which included \$77 of advertising classified as institutional. In accordance with 807 KAR 5:016, the

Commission has excluded this expense for rate-making purposes as it enhances the image of the utility and provides no benefit to the consumer.

# Contributions

During the test year Shelby incurred \$275 in expenses for contributions to various civic and charitable organizations. The Commission is of the opinion that expenditures of this type produce little, if any, benefits to Shelby's consumers and, therefore, should not be allowed for rate-making purposes.

#### Interest Income

During the test year Shelby had interest earnings on its investments of \$121,826, of which \$79,445 was earned on commercial paper issued by the National Rural Utilities Cooperative Finance Corporation. Shelby proposed adjustment of \$48,958 to reduce interest income based on the recent decline in interest rates for commercial paper. Commission is of the opinion that such an adjustment should not be made based on changes in interest rates without considering the amounts invested and the length of time the funds are invested. This opinion is supported by Shelby's experience since the end of the test year. During a period of declining interest rates, Shelby's interest income for the 12 months ending February 28, 1983, was \$123,758, which is slightly greater than the test year interest income.

The Commission is of the opinion that the proposed adjustment does not consider the various factors that affect

the amount of interest income. Therefore, the proposed adjustment has been rejected, and the actual test year interest income will be included in the determination of revenue requirements.

The effect of the revised pro forma adjustments on net income is as follows:

	Actual Test Period	Pro Forma Adjustments	Adjusted Test Period
Operating Revenues	\$6,492,320	\$ 903,811	\$ 7,396,131
Operating Expenses	5,972,696	1,034,674	7,007,370
Operating Income	\$ 519,624	\$ <130,863>	\$ 388,761
Interest on Long-Term			
Debt	387,734	66,727	454,461
Other Income & (Deducti	ons)-		•
Net	148,565	\$ <35,624>	112,941
Net Income	\$ 280,455	S <233,214>	\$ 47,241

# REVENUE REQUIREMENTS

The actual rate of return on Shelby's net investment rate base established herein for the test year was 5.1 percent. After taking into consideration the pro forma adjustments Shelby would realize a rate of return of 3.8 percent. The Commission is of the opinion that the adjusted rate of return is inadequate and a more reasonable rate of return would be 9 percent. In order to achieve this rate of return Shelby should be allowed to increase its annual revenue by \$520,835 which would result in a Times Interest Earned Ratio of 2.25. This additional revenue will provide

net income of \$568,076 which should be sufficient to meet the requirements in Shelby's mortgage securing its long-term debt.

### Rate Design and Revenue Allocation

Shelby proposed to allocate the revenue increase in approximately equal percentages to all rate classes, but proposed a reallocation of revenue within the rate classes. It proposed to increase the customer charge for the General Service Rate from \$6.72 to \$9.00. Shelby's witness, Mr. Craig Bradley, testified that it was Shelby's intent to cover its fixed costs through the basic consumer charge. Calculations were given to substantiate the fixed cost amount; however, a cost of service study was not performed. The appropriate method for allocating the increase in revenue to the customer charge would be to increase the present charge of \$6.72 by the same percentage as the total increase in revenue allowed herein.

Shelby proposed to change its existing rate design in Schedules 1 and 2 by combining both the General Service Classes and reducing the number of rate block steps. The existing rates include an inverted block that Shelby proposed to eliminate. Under the recommended rate design in this class, Shelby allocated the revenue increase principally to the consumers using under 3000 KWH with less of an increase to the consumers at the higher usage levels. This method of revenue allocation was used to create an incentive for more consumption, therefore spreading Shelby's fixed costs and

operating costs over more kilowatt hours of energy sold. 1 The Commission approves combining the two rate schedules and flattening the rate blocks within the schedule, but does not favor promotional rate-making which would be the result of Shelby's proposed rates. Therefore, the Commission is of the opinion that the changes in rate design should be accepted except that the increase in revenue to the General Service Rate should be allocated to the charges within this class in a manner that would reduce the variance between the percentage of increase at the minimum bill and the higher usage levels.

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#### SUMMARY

The Commission, having considered the evidence of record and being advised, is of the opinion and finds that:

- (1) The rates in Appendix A are the fair, just and reasonable rates for Shelby and will produce gross annual revenue sufficient to pay its operating expenses, service its debt and provide a reasonable surplus for equity growth.
- (2) The rates proposed by Shelby would produce revenues in excess of those found reasonable herein and should be denied upon application of KRS 278.030.

IT IS THEREFORE ORDERED that the rates in Appendix A be and they hereby are approved for service rendered by Shelby on and after June 15, 1983.

Transcript of Evidence, April 19, 1983, page 37.

IT IS FURTHER ORDERED that the rates proposed by Shelby be and they hereby are denied.

IT IS FURTHER ORDERED that within 30 days from the date of this Order Shelby shall file with the Commission its revised tariff sheets setting out the rates approved herein.

Done at Frankfort, Kentucky, this 15th day of June, 1983.

PUBLIC SERVICE COMMISSION

Shelly Chelly Chelly Chelly

Katherine Kandall Vice Chairman

Commissioner

ATTEST:

Secretary

#### APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 8713 DATED JUNE 15. 1983

The following rates and charges are prescribed for the customers in the area served by Shelby Rural Electric Cooperative Corporation. The rates and charges included in this appendix incorporated the rates of Case No. 8613. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the date of this Order.

#### RATE 1

#### GENERAL SERVICE\*

#### Rates:

#### Demand Charge:

First 20 KW of billing demand per month, no demand charge. Excess of 20 KW of billing demand per month @ 4.50 per KW.

#### Energy Charge:

	Consumer Facility Charge	\$ 7.18 (Minimum)			
First	600 KWH per month	@ .07863¢ per KWH			
Next All Over	1400 KWH per month 2000 KWH per month	<ul><li>€ .06372¢ per KWH</li><li>€ .06240¢ per KWH</li></ul>			

#### MINIMUM MONTHLY CHARGE:

The minimum monthly charge under the above rate shall be \$7.18. Where it is necessary to extend or reinforce existing distribution facilities, the minimum monthly charge may be increased to assure adequate compensation for the added facilities. Where the minimum charge is increased in accordance with the terms of this section, additional energy and demand shall be included in accordance with the foregoing rate schedule.

The minimum monthly charge for three-phase service shall be \$1.00 per KVA of installed transformer capacity or the minimum monthly charge stated in the contract for service.

# SPECIAL PROVISIONS:

Contract:

An "Agreement for Electric Service" shall be executed by the consumer for service under this rate schedule if the service is to be three-phase or if required by the Seller.

SPECIAL RULES:

Motors having a rated capacity in excess of ten horsepower (10 HP) must be three-phase. Motors in excess of five horsepower (5 HP) shall be provided with compensating starting equipment acceptable to the Seller.

#### RATE 2 LARGE POWER SERVICE

#### Rates:

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# Demand Charge

\$4.50 Per Month Per KW of Billing Demand

# **Energy Charge**

First	100 KWH Per KW	Demand	.05713¢ Per KWH
Next	100 KWH Per KW	Demand	.05156¢ Per KWH
All Over	200 KWH Per KW	Demand	.04600¢ Per KWH

# AVAILABILITY:

Available to all consumers whose KW demand shall be greater than 50 KW, including residential and farm consumers who do not qualify under availability of service under Rate 1, located on or near Seller's line for all types of usage, subject to the established Rules and Regulations of Seller.

# RATE 3 OUTDOOR AND STREET LIGHTING SERVICE\*

# Rates:

Type of Fixture	Lumen Output	Monthly Charge		
Mercury Vapor or HPS	7,000 - 10,000	\$ 7.04		
Mercury Vapor or HPS	20,000 - 30,000	\$10.21		

# RATE 4 STANDBY POWER RATE\*

#### Rates:

# Demand Charge

The identical demand rate billed by East Kentucky Power Corporation from the wholesale power invoice for that particular month.

# **Energy Charge**

First	100	KWH	per	KW	Demand	.05481¢	Per	KWH
Next	100	KWH	per	KW	Demand	.04891¢	Per	KWH
All Over			-		_	.04304¢	Per	KWH

# \*Fuel Adjustment Clause:

This rate may be increased or decreased by an amount per KWH equal to the fuel adjustment amount per KWH as billed by the Wholesale Power Supplier plus an allowance for line losses. The allowance for line losses will not excess 10 percent and is based on a 12-month moving average of such losses. This Fuel Clause is subject to all other applicable provisions as set out in 807 KAR 5:056.